

Math Out of the Box® Fourth Grade Set

Math Out of the Box® is based on the latest research about how children learn. A team of teachers, directed by specialists in math and science reform, worked together to develop, field-test, revise, and complete the highest-quality lessons and materials based on the NCTM Principles and Standards for School Mathematics. Each Algebra, Geometry, and Measurement module offers 20 classroom-tested lessons, for approximately 4-6 weeks of instruction. Number Concepts modules are separated into 2 units with 2 manuals that both provide 20-30 classroom-tested lessons, each for approximately 9 weeks of instruction. All modules are developed around a central mathematical theme, materials provided equip one class of 30 students, and is correlated to Kentucky's Program of Studies.

Contract Price

\$3,697.80

Grade

4

TYPE

P2

Copyright

2009

Author

Clemson University

Edition

1st

Content

Mathematics

ReadabilityAccessibility

Nimas MathML

Research

<http://www.mathoutofthebox.org/research/researchbase.shtml>

Teacher Edition

9781435001855	\$189.95
Developing Algebraic Thinking: Signs and Symbols Teacher's Guide	
9781435001978	\$189.95
Developing Geometric Logic: Corners and Containers Teacher's Guide	
9781435002098	\$189.95
Developing Measurement Benchmarks: Inside and Outside Teacher's Guide	
9781435001459	\$209.95
Developing Number Concepts: Stories and Statements Teacher's Guide (A)	
9781435001480	\$189.95
Developing Number Concepts: Stories and Statements Teacher's Guide (B)	

Essential Items

9780892784806	Nimas MathML	\$715.95
Developing Measurement Benchmarks: Inside and Outside Module		
9780892784509	Nimas MathML	\$825.95
Developing Algebraic Thinking: Signs and Symbols Module		
9781435001497	Nimas MathML	\$1,075.95
Developing Number Concepts: Stories and Statements Module (A/B)		
9780892784684	Nimas MathML	\$1,079.95
Developing Geometric Logic: Corners and Containers Module		

Ancillary Items

Calculator Set B	\$219.95
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Free with Purchase items

Premium Content

<http://www.carolinacurriculum.com/login.asp>

Evaluation Tool for Basal Instructional Materials
Mathematics (2009 – 2015)

Provided by the Publisher	ISBN 9781435003217		Publisher - Carolina Curriculum Publishing		Provided by the Publisher
	Math Out of the Box® Fourth Grade Set				
	Type - P2	Author - Clemson University			
	Copyright - 2009	Edition - 1st	Readability -		
	Course - Mathematics		Grade(s) - 4		
Teacher Edition ISBN if applicable 9781435001855					

Overall Recommendation: Overall Strengths, Weaknesses, Comments: Click here to enter text.	Recommended as BASAL if this box is not checked, the evaluators have chosen NOT recommend as basal
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NIMAC Accessibility NML
 Ancillary Yes
 Free with Purchase Yes
 Research Yes <http://www.mathoutofthebox.org/research/researchbase.shtml>

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CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations	Moderate Evidence
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Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 5 Big Ideas of mathematics to the following extent:

a) Number Properties and Operations	Moderate Evidence
b) Measurement	Strong Evidence
c) Geometry	Strong Evidence
d) Data Analysis and Probability	Moderate Evidence
e) Algebraic Thinking	Strong Evidence

2) Addresses content-specific enduring understandings from the related Program of Studies standards.

Strong Evidence

3) Addresses content-specific skills and concepts from the related Program of Studies standards.

Moderate Evidence

4) Content addressed is current, relevant and non-trivial

Strong Evidence

5) Provides opportunities for critical thinking/reasoning

Strong Evidence

6) Strengths, Weaknesses, Comments:

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

The strength of the program has a good base for building a foundation. Lots of inquiry and hands on by the students to explore and investigate Math strands.

Missing in Number Properties and Operations was even and odd unless it was embedded in another concept. Little skill development in understanding factors and multiples. In Data and Probability we were unable to locate Venn Diagrams, Circle Graphs and Pictographs in any strand.

B. Functionality & Suitability

Moderate Evidence

1) Suitability

Strong Evidence

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) Content quality

Moderate Evidence

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community
- Interconnections among mathematical topics

3) Connections to Literacy

Strong Evidence

- Employs a variety of reading levels and is grade/level appropriate
- Use of multiple representations-concrete, visual/spatial, graphs, charts, etc.
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- The text is engaging and facilitates learning
- Embedded activities enhance the understanding of the text

Note: may apply to either student or teacher editions

4) Connections to Technology

Little or No Evidence

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data
- Embeds web links as a mathematics resource.

5) Support for Diverse Learners

Little or No Evidence

- Provides support for ESL students
- Provides support for differentiation of instruction in diverse classrooms
- Challenge for gifted and talented students
- Support for students with learning difficulties

Note: may apply to either student or teacher editions

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Connections to Technology is only evident in use of calculators, a website or CD-ROM for practice would be beneficial. Teacher's editions does not provide support for diverse

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learners with each lesson. Common errors, alternative teaching approaches or extensions for gifted and talented students would be helpful.

C. Supports Inquiry and Skill Development

Moderate Evidence

1) Promotes Inquiry, research and Application of Learning

Moderate Evidence

- Provides opportunities for inquiry and research that includes activities such as gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions, formulating authentic questions to deepen and extend mathematical reasoning.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, generalizing, justifying, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, number lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

Note: may apply to either teacher or student edition

2) Skill Development

Moderate Evidence

- Provides opportunities to make sense of all mathematics
- Provides opportunities to recognize, create, and extend patterns.
- Provides opportunities for critical thinking and reasoning.
- Provides opportunities to justify/prove responses.
- Provides opportunities to ask deeper questions.
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

Program is very teacher driven with little follow-up practice to extend and review skill explored. Lack of technology and student record book hinder independence for students and places growth of concepts fully on the teacher. Lesson plans are a great guide, but implementation and application of learning is solely fostered by the teacher.

D. Supports Best Practices of Teaching and Learning

Moderate Evidence

1) Engages Students

Strong Evidence

- Includes content geared to the needs, interests, and abilities of all students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

Moderate Evidence

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

Very little teacher assessment outside of module A and B. A lot of teacher observation and anecdotal records required to validate grades.

E. Has an Organization/ Format that Supports Learning and Teaching

Moderate Evidence

1) Organizational Quality

Moderate Evidence

- Print and/or electronic materials present minimal barriers to learners, but also add encouragement for students to stretch and make further explorations.
- Presents chapters/lessons in an organized and logical sequence
- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components, interactive software, calculators, physical and virtual manipulatives) as either student or teacher resources
- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
- Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
- Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

Strong Evidence

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

[Click here to enter text.](#)

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

Little or No Evidence

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving
- Provides opportunities for intervention.

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

[Click here to enter text.](#)
